



Royal Netherlands
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Half compressed OBS for manned VOS

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KNMI



Half compressed OBS for manned VOS

- Disadvantages
- Advantages
- Implementation
- Numbers/calculation



Advantages half compressed OBS to one dedicated address and dedicated SAC

- 50 percent reduction of transmission costs via Inmarsat-C (excluding delivery confirmation costs).
- Monitoring VOS activity easier (less GTS hubs involved).
- Every country can obtain his own SAC and bear the transmission costs of its own VOS.



Dis-advantages half compressed OBS to one dedicated address and dedicated SAC

- In case of one address, failure means: No OBS's at all.
- Compressed OBS's can't be processed if a wrong address (e.g. regular SAC 41 destination is used). De-compressing software at every SAC 41 destination could ease this problem.
- Normal FM-13 obs's to a "uncompressed OBS"-destination can only be processed if handling software is suitable.
- Ships officers have to be well instructed about the procedure.
- Special settings required in TurboWin are lost after re-installation so officers do have to keep aware of it.



Half Compressed OBS Implementation procedure

Necessary steps for implementation:

- Obtain address details of dedicated E-mail address Meteo France
- Registration form:
 - “Application for Stratos Service Inmarsat-C Special Access Code” to be filled in.
- TurboWin file “Inmarsat.les” to be modified for dedicated SAC (431 for the Netherlands) and related LES Station 12.
- Instructions to be given to VOS vessels:
 1. Installing/copying new “Inmarsat.les” file into TurboWin
 2. TurboWin.exe -2 (-2 added to execute command)
 3. Check “maintenance->Station data->code format=Compressed



Numbers, current situation for KNMI (month Dec. 2009):

- Inmarsat-C costs regular OBS ex VAT:

$$4 \text{ units} \times \$ 0,14 = \$ 0,56.$$

$$2559 \text{ Dutch OBS's} \times \$ 0,56 = \$ 1509,81$$

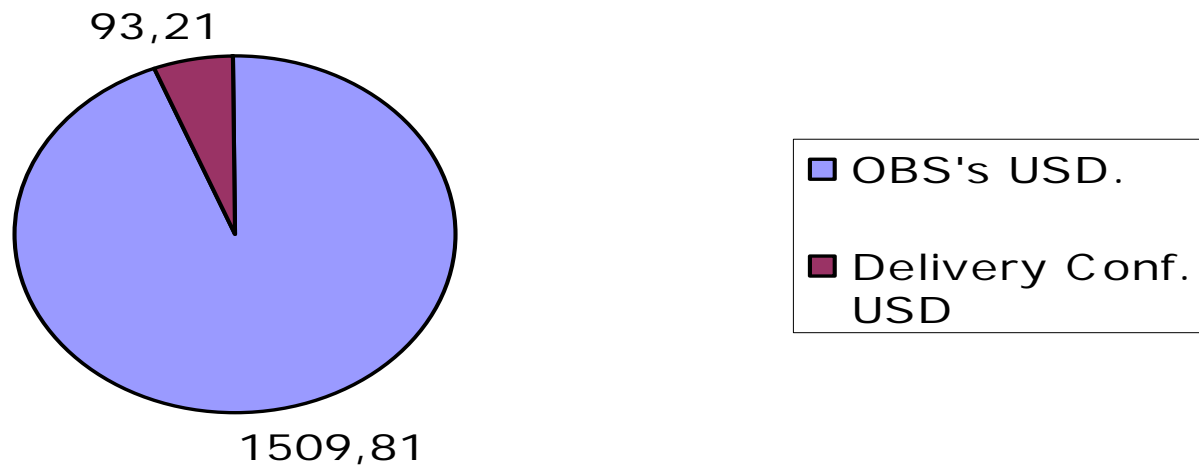
28% OBS's deliv. Conf.

$$717 \text{ OBS's} \times \$ 0,14 = \$ 93,21$$

$$\text{Total monthly costs} = \$ 1603,02$$

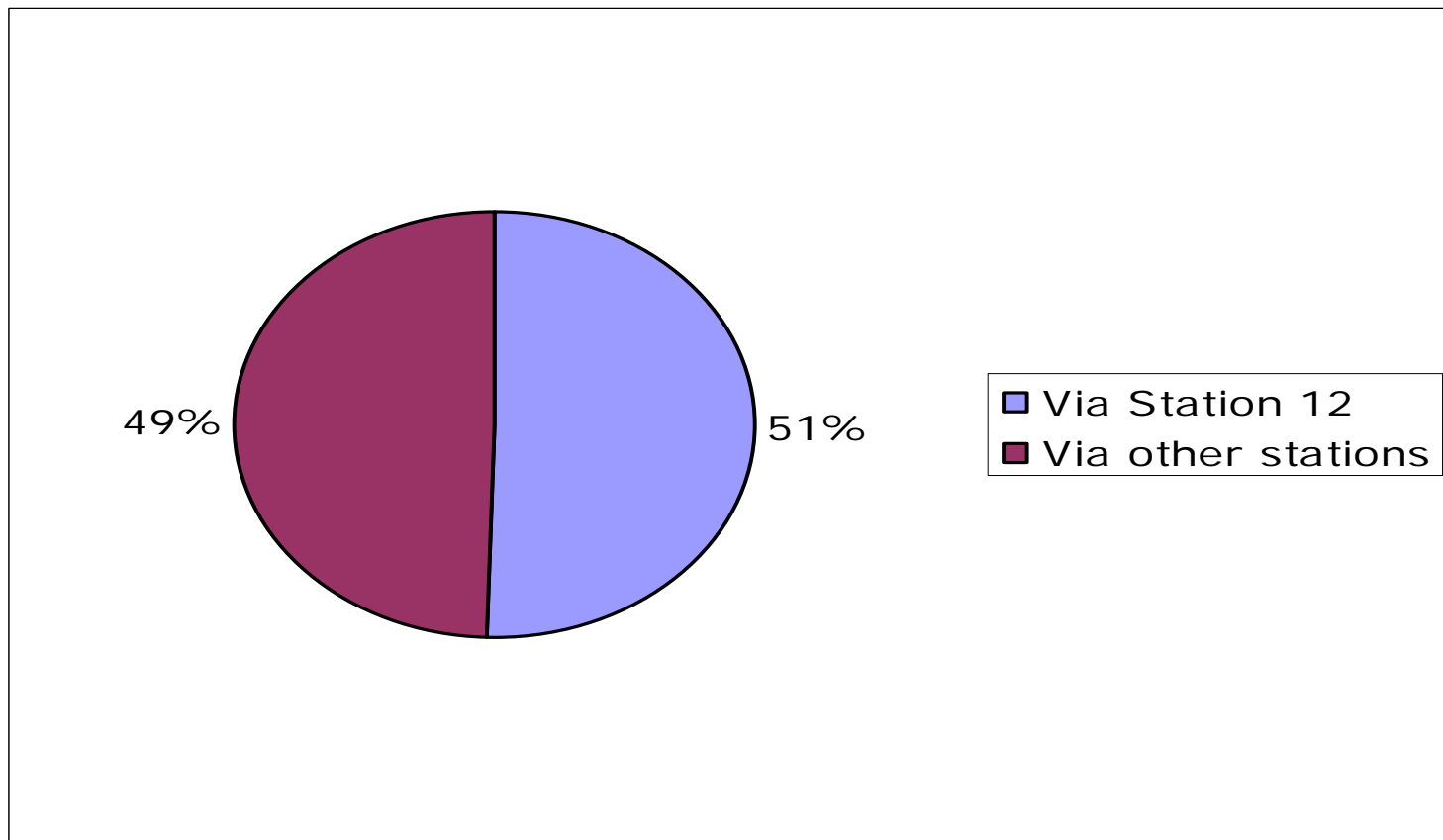


Current cost Dutch VOS via Station 12 (ex VAT)





Current distribution of Dutch VOS transmission costs





Numbers, All Dutch OBS's , via Stratos Global (Station 12):

Dutch OBS's sent in December 2009 (All LES):

If Uncompressed to LES 12:

5313 OBS's x \$ 0,56 = \$ 2975,28

28% OBS's with del. Conf: = \$ 193,39

Total costs uncompr.: =\$ 3168,67

If Compressed to LES 12:

5313 OBS's x \$ 0,28 = \$ 1487,64

28% OBS's with del. Conf: = \$ 193,39

Total costs compressed.: =\$ 1681,03 ex VAT



Costs for KNMI (all Dutch OBS's uncompressed WW vs compressed via Station 12 to Meteo France:

Current situation:

2559 Dutch OBS's uncompressed = \$ 1603,02

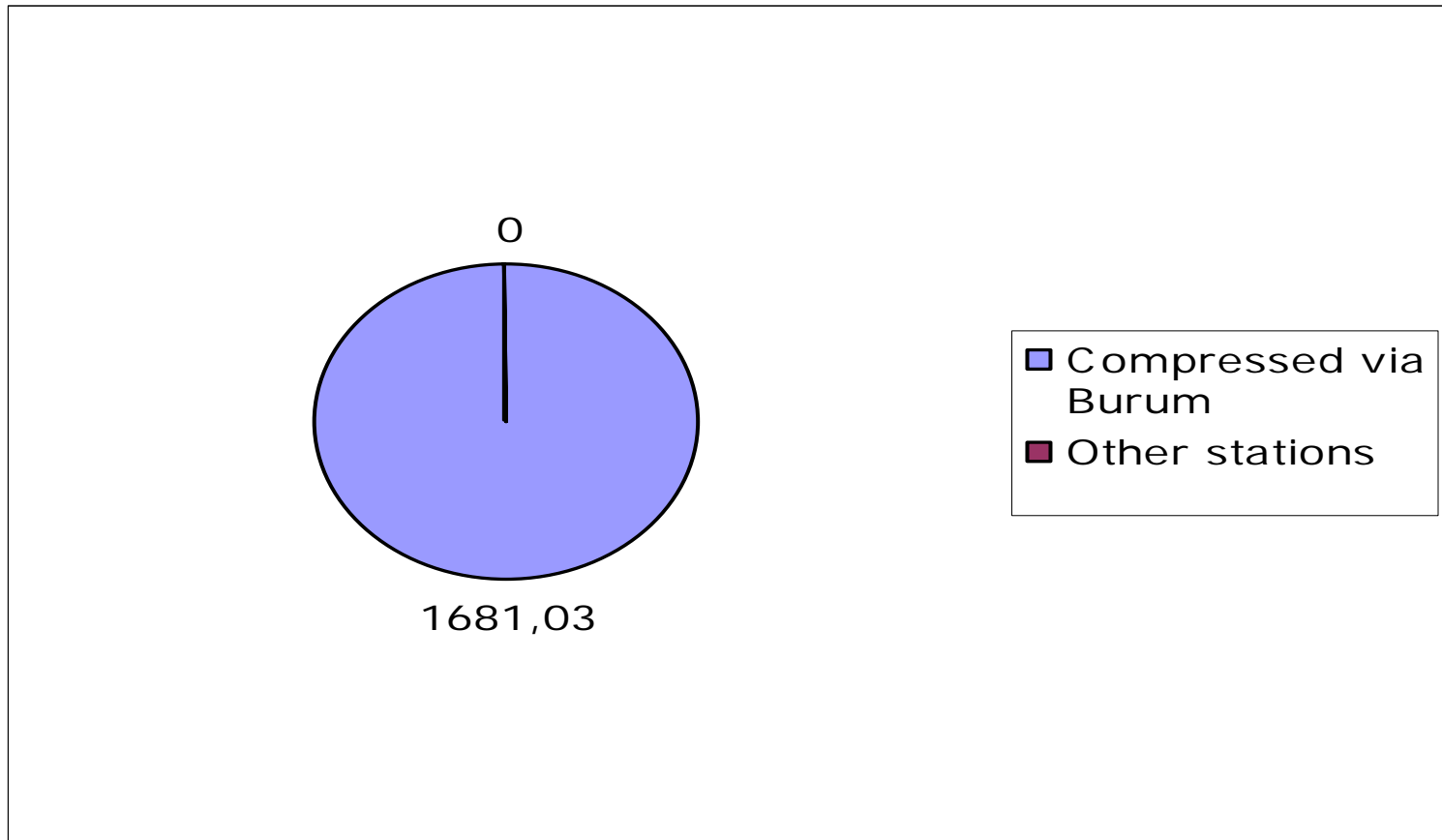
Near future situation:

5313 Dutch OBS's compressed = \$ 1681,03

Cost for KNMI will increase with =\$ 78,--

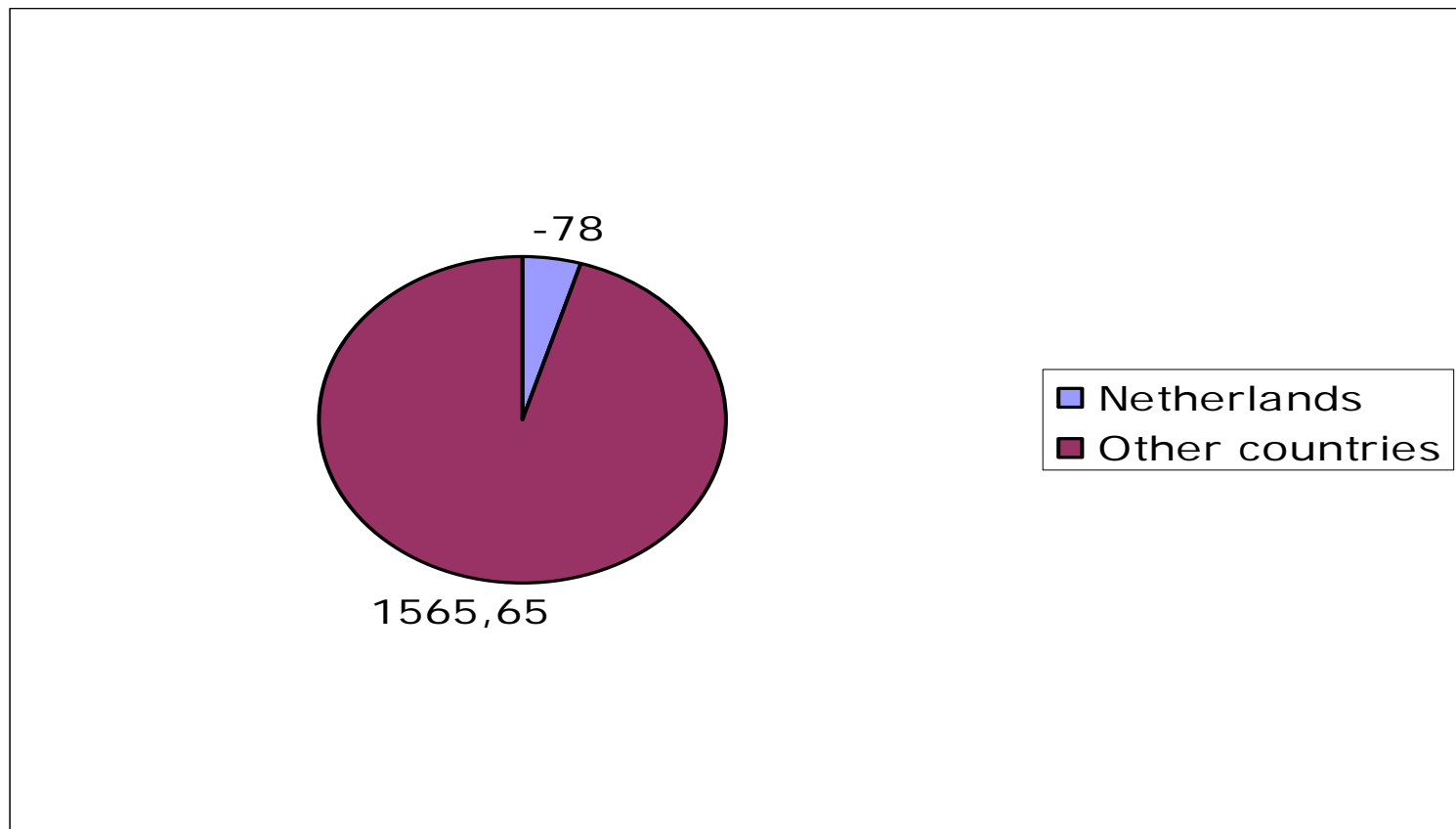


New distribution costs Dutch VOS (compressed obs)





Reduction of costs Dutch VOS (compressed obs) (USD)





Conclusions:

- The cost for KNMI will increase.
- The costs for other NMS's will be reduced.

Remark:

- If other NMS's decide to switch over to half compressed transmission, everyone (including KNMI) would benefit.





